

**Notice of Allowability**

Application No.

09/759,805

Examiner

David H Kruse

Applicant(s)

GROTE ET AL.

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the Amendment filed 14 November 2003.
2. ☒ The allowed claim(s) is/are 1-4, 63-67 and 83-91, renumbered 1-18.
3. ☐ The drawings filed on \_\_\_\_\_ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
  - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No. \_\_\_\_\_.
  - (b) ☐ including changes required by the proposed drawing correction filed \_\_\_\_\_, which has been approved by the Examiner.
  - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the margin according to 37 CFR 1.121(d).

9. ☒ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| 1 <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                  |
| 2 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 6 <input checked="" type="checkbox"/> Interview Summary (PTO-413), Paper No. <u>12/03</u> . |
| 3 <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No. _____             | 7 <input checked="" type="checkbox"/> Examiner's Amendment/Comment                          |
| 4 <input checked="" type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8 <input type="checkbox"/> Examiner's Statement of Reasons for Allowance                    |
|  | 9 <input type="checkbox"/> Other  |

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR § 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Lila Akrad on 18 December 2003.

The application has been amended as follows:

The Title of the invention has been amended as follows;

HYBRID MAIZE PLANT [&] AND SEED X1069G

The Abstract of the Invention has been replaced with the following;

-- This invention relates to a hybrid maize plant, designated as X1069G, produced by crossing two Pioneer Hi-Bred International, Inc inbred maize lines GE535769 and GE515721. This invention thus relates to the hybrid seed X1069G, the hybrid plant produced from the seed, and variants and trivial modifications of hybrid X1069G. This invention also relates to methods for producing a X1069G hybrid maize plant containing genetic material for one or more desirable traits and to the maize plant produced by that method. This invention further relates to methods for making maize lines produced from hybrid maize line X1069G. --

The claims have been amended as follows:

Claim 84 (amended): A method of introducing a desired trait into a hybrid maize line X1069G comprising:

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(a) crossing at least one of inbred maize parent plants GE535769 and GE515721, representative [samples] seed of which have been deposited under ATCC Accession Nos. as \_\_\_\_ and \_\_\_\_ respectively, with another maize line that comprises a desired trait, to produce F1 progeny plants, wherein the desired trait is selected from the group consisting of male sterility, herbicide resistance, insect resistance, disease resistance and waxy starch;

(b) selecting said F1 progeny plants that have the desired trait to produce selected F1 progeny plants;

(c) backcrossing the selected progeny plants with said inbred maize parent plant to produce backcross progeny plants;

(d) selecting for backcross progeny plants that have the desired trait and morphological and physiological characteristics of said inbred maize parent plant to produce selected backcross progeny plants;

(e) repeating the steps [of backcrossing to said inbred maize parent plant] (c) and (d) three or more times in succession to produce a selected fourth or higher backcross progeny plant[s]; and

(f) crossing said fourth or higher backcross progeny plant with the other inbred maize parent plant to [generate] produce a hybrid maize line X1069G with the desired trait and all of the morphological and physiological characteristics of hybrid maize line X1069G listed in Table 1 as determined at the 5% significance level when grown in the same environmental conditions.

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Claim 89 (amended): A method of modifying fatty acid metabolism, phytic acid metabolism or carbohydrate metabolism in a hybrid maize line X1069G comprising:

(a) crossing at least one of inbred maize parent plants GE535769 and GE515721, representative [samples] seed of which have been deposited under ATCC Accession Nos. as \_\_\_\_ and \_\_\_\_ respectively, with another maize line that comprises a nucleic acid molecule encoding an enzyme selected from the group consisting of phytase, steryl-ACP desaturase, fructosyltransferase, levansucrase, alpha-amylase, invertase and starch branching enzyme;

(b) selecting said F1 progeny plants that have the desired trait to produce selected F1 progeny plants;

(c) backcrossing the selected progeny plants with said inbred maize parent plant to produce backcross progeny plants;

(d) selecting for backcross progeny plants that have the desired trait and morphological and physiological characteristics of said inbred maize parent plant to produce selected backcross progeny plants;

(e) repeating the steps [of backcrossing to said inbred maize parent plant] (c) and (d) three or more times in succession to produce a selected fourth or higher backcross progeny plant[s]; and

(f) crossing said fourth or higher backcross progeny plant with the other inbred maize parent plant to [generate] produce a hybrid maize line X1069G with the desired trait and all of the morphological and physiological characteristics of hybrid maize line

X1069G listed in Table 1 as determined at the 5% significance level when grown in the same environmental conditions.

Claim 90 (amended): A plant produced by the method of claim 89, wherein the plant [has modified fatty acid metabolism, modified phytic acid metabolism or modified carbohydrate metabolism] comprises the nucleic acid molecule and all of the physiological and morphological characteristics of hybrid maize line X1069G listed in Table 1 as determined at the 5% significance level when grown in the same environmental conditions.

2. Applicant is reminded that upon the issuance of a Notice of Allowability, the requirements under 37 C.F.R § 1.809 (c)-(e) must be perfected in the instant application prior to or at the time of payment of the issue fee.

**REQUIREMENT OF ALLOWANCE UNDER 37 CFR §§ 1.801-1.809**

The Deposit Statement in the specification is deemed in accordance with 37 CFR §§ 1.801-1.809. Since the application is otherwise in condition for allowance except for the needed deposit of seed, and since the Office has received written assurance that an acceptable deposit will be made on or before payment of the issue fee, the Office is authorized to mail Applicant a Notice of Allowance and Issue Fee Due together with a requirement that the needed deposit be made within THREE (3) MONTHS of the mail date of this letter (see 37 CFR § 1.809(c)).

As set forth in 37 CFR § 1.809(c), Applicant is required to deposit 2500 seeds of the claimed plant within THREE (3) MONTHS of the mail date of this letter; thus the time for making the deposit is on or before the payment of the issue fee.

Applicant is reminded that once the deposit of seed has been made, information regarding the date of deposit, description of the deposited material including number of seeds deposited, name and address of the depository, and the accession number must be added to the specification in order to comply with 37 CFR § 1.809(d). In addition, the

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claims must be amended to replace the blank "\_\_\_\_\_" with the appropriate Accession Number. Amendments to the specification and the claims must be filed under 37 CFR § 1.312.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David H. Kruse, Ph.D. whose telephone number is (703) 306-4539, **(571) 272-0799 after 6 January 2004**. The examiner can normally be reached on Monday to Friday from 8:00 a.m. to 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Amy Nelson can be reached at (703) 306-3218, **(571) 272-0804 after 6 January 2004**. The fax telephone number for this Group is (703) 872-9306 Before Final or (703) 872-9307 After Final.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group Receptionist whose telephone number is (703) 308-0196.



AMY J. NELSON, PH.D.  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1600

David H. Kruse, Ph.D.  
18 December 2003